AMENDENTS TO THE CLAIMS

Please cancel claims 1-6 without prejudice and disclaimer.

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of claims:

Claims 1-6 (canceled).

Claim 7. (new) A backup gateway apparatus operating on a home network, comprising:

a home net communicator selectively connected to a peripheral device;

an outside connection communicator selectively connected to an Internet service provider and connected to a primary gateway apparatus, the primary gateway apparatus performing a routing operation, an application conversion, and a protocol conversion between the peripheral device and the Internet service provider;

a routing table that stores an address of the peripheral device and an address of the Internet service provider; and

a controller configured to transmit a Route Information Protocol (RIP) to the primary gateway apparatus, to update the routing table based on a response to the RIP from the primary gateway apparatus, to determine that the primary gateway apparatus is malfunctioning when the response to the RIP is not detected for a predetermined time, to perform the routing operation between the peripheral device and the Internet service provider based on the updated routing table without performing the application conversion and the protocol conversion

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when it is determined that the primary gateway apparatus is malfunctioning, to
determine that the primary gateway apparatus is no longer malfunctioning when
the response to the RIP is received from the primary gateway apparatus after it
was determined that the primary gateway apparatus has malfunctioned, and to
terminate the routing operation when it is determined that the primary gateway
apparatus is no longer malfunctioning, the primary gateway apparatus thereafter
re-starting the routing operation, the application conversion, and the protocol
conversion between the peripheral device and the Internet service provider.

Claim 8. (new) A home network system, comprising:

a peripheral device provided inside of a home; and

a primary gateway apparatus that performs a routing operation, an
application conversion, and a protocol conversion between the peripheral device
and an Internet service provider; and

a backup gateway apparatus, comprising:

a home net communicator selectively connected to the peripheral
device;

an outside connection communicator selectively connected to the
Internet service provider and connected to the primary gateway apparatus;

a routing table that stores an address of the peripheral device and
an address of the Internet service provider; and

a controller configured to transmit a Route Information Protocol
(RIP) to the primary gateway apparatus, the routing table being updated in a
response to the RIP from the primary gateway apparatus, to determine that the

primary gateway apparatus is malfunctioning when the response to the RIP is

not detected for a predetermined time, to perform the routing operation between

the peripheral device and the Internet service provider based on the updated

routing table without performing the application conversion and the protocol

conversion when it is determined that the primary gateway apparatus is

malfunctioning, to determine that the primary gateway apparatus is no longer

malfunctioning when the response to the RIP is received from the primary

gateway apparatus after it was determined that the primary gateway apparatus

has malfunctioned, and to terminate the routing operation when it is determined

that the primary gateway apparatus is no longer malfunctioning, the primary

gateway apparatus thereafter re-starting the routing operation, the application

conversion, and the protocol conversion between the peripheral device and the

Internet service provider.

Claim 9. (new) A method for a backup gateway to assume predetermined

tasks of a primary gateway when the primary gateway malfunctions, comprising:

having the backup gateway periodically transmit a predetermined signal to

the primary gateway apparatus to determine a state of the primary gateway;

having the backup gateway assume a routing operation, normally

performed by the primary gateway, between a peripheral device and an Internet

service provider when the backup gateway determines that a response to the

predetermined signal has not been received from the primary gateway within a

predetermined period of time; and

returning control of the routing operation to the primary gateway when the response to the predetermined signal is received by the backup gateway after the backup gateway has assumed the routing operation.

Claim 10. (new) The method of claim 9, wherein the predetermined signal comprises a Routing Information Protocol.